Land Management Plans- An Overview

A Land Management Plan (LMP) is the tool by which a specific property is managed and maintained. It is the document that outlines the principles and objectives for which a property is protected, and it lays out the specific plans and actions by which those objectives are met. In most instances goals and objectives of protecting land are varied, and frequently those goals can be conflicting, so achieving a balance of meeting land management objectives is critical. Controlling invasive species; allowing public education, access and recreation; protecting wetlands; enhancing water quality; maintaining wildlife habitat; promoting agricultural purposes; restoring native flora; protecting rare or threatened species are all important goals for land protection and conservation, however often times meeting one or more of those goals can compromise meeting others. Therefore it is important to rank priorities and to regularly review and revise management plans over time to adapt to changes. Also essential to incorporate into a LMP are any restrictions that exist on the property, which would limit certain uses or activities, such as Conservation Restrictions, access easements, historical covenants, grant requirements, etc.

Preparing a Land Management Plan requires the compilation of a range of information in order to create a comprehensive document that guides the reader to understanding the history of the property, the current state of the property and the future intended conditions of property. There is no standard formula for a Land Management Plan that applies to every property. Each property is unique, as should be the Land Management Plan for that property. There are however important pieces of information for every property that should be collated and gathered prior to, or during the process of drafting a LMP. Much of this information gathering can be done using staff, volunteers, neighbors, residents and donor resources through a combination of interviews, meetings, site visits etc. Information to include are the natural resources, any cultural and historic information, the current uses, issues on the property, community concerns and ideas, the intent of a property acquisition, etc.

Prior to preparing the LMP a Natural Resource Inventory or Report (NRI) should be produced for each property protected for conservation purposes. It is the baseline set of conditions that exist on a property on which the goals for protecting the property are based. An NRI should document the flora, fauna, geologic, soils and historic uses comprising the property. Rare/endangered/threatened species and habitats, and where they are located should be noted, as well as a list and locations of invasive species, including extent and threat. In addition to documenting the natural elements, the manmade elements of the property should be identified including structures, access points, trails, and other key features or archeological artifacts, extrapolating the historical uses of the property from those elements. With this information a better picture of the resources being protected will emerge, as well as threats to those resources, all of which will help to shape the management objectives for the property.

Once a Natural Resource Inventory is complete the Land Management Plan can begin to come together. As mentioned previously there is no one size fits all LMP, but the basic outline which can be followed for most Land Management Plans is the following:

I. Introduction

A. Acquisition and Ownership Purpose

This section should provide relevant history and information pertinent to the acquisition including dates, donor/landowner, twists and turns of the project, important background information including support of various boards and committees including Town Meeting approval, and the intent of the acquisition.

B. Site Description and Location

This should include parcel size, site location and zoning designation. It should also include a list of prominent natural resource and conservation attributes of the property, as well as a context of other nearby conservation land as well as abutting properties and their uses. Also describe habitat types, trails, structures or interesting features including rare and/or endangered species or habitats. This is a description of the physical aspects of the property, including natural resources; water resources, watersheds, topography, geology, soils, plant communities, rare species and rare/exemplary community types, fish and wildlife; as well as adverse conditions (ie invasive plant presence, degraded trails, abandoned structures etc). A Natural Resource Inventory conducted prior to creating the Land Management Plan will provide most of this kind of information and detail and can be referenced.

C. Historic, Recent and Intended Property Uses

Discuss the history of the land use both known and inferred. Include information about any archeologically significant sites or structures. How was the property used in the recent past, prior to acquisition? Also discuss current or intended land uses including public access (i.e., trails and/or parking). If there are any restrictions or easements on the property (conservation or agricultural restrictions, and/or historical covenants) include those as well.

II. Property Management

A. Guiding Principles

State the overall purpose and intent of the acquisition, which the management plan is guided by. Include any requirements mandated by outside grant funding.

B. Management Objectives and Oversight

This section should specify what the primary goals are for management of the property, taking into account current uses on the property; threats to management objectives and actions to take to achieve objectives. Specify which departments/staff will be responsible for the property management and oversight. Provide details of purposes for which the property will be managed for i.e., water supply protection, protecting scenic views, wildlife habitat protection, agricultural, environmental education etc. and where specifically on the property those objectives will be managed. Include discussion of creating a management committee if deemed necessary. Creating a matrix table to aid in summarizing and implementing the management objectives is helpful for this section in order to identify **Targets** (i.e., Wetlands Protection), **Goals** (i.e., maintain wetlands/vernal pools in their natural unobstructed state), **Threats** (i.e., clogged culvert underway old woods road backing up wetlands and vernal pool not draining properly) and **Actions** (i.e., keep culvert cleared and consider replacing if compromised)

C. Permitted Uses

Include the allowed uses on the property including hours open to the public.

D. Prohibited Uses

Include the activities not allowed on the property and specify any areas of the property excluded from public access.

E. Precautions and Warnings

Discuss any concerns with site conditions that could be hazardous or threatening including ticks, mosquitoes, poison plants, flooded trail conditions, dilapidated structures, railroad crossings, etc.

F. Public Parking

Provide information about where public parking will be made available. Indicate whether temporary parking may be necessary prior to establishing a permanent parking solution. How many cars will be provided for, and whether horse trailers are included. Also consider handicapped parking. Will plowing be provided during the winter?

G. Signage

Include information about what type and size of signage is anticipated to be installed and where on the property it will be placed.

H. Enforcement and Public Safety

Specify how public safety and rules enforcement will take place and how relevant agencies will interact.

III. Property Maintenance

A. Maintenance Tasks

Discuss specifics of what maintenance will be required in the short and long term as best anticipated. Will a parking area be maintained/plowed/landscaped? Will a trail be established and marked and how will maintenance be accomplished; volunteers, staff, combination? Is mowing or clearing of established trails needed? Are there issues with drainage of wetlands or waterways that will require maintenance such as culverts or beaver deceivers? Are there structures on the property which will require maintenance such as

bridges/boardwalks/buildings/signage/benches? Will the property have a forestry management plan and are there invasive species on the property which need to be addressed? If there are recreational playing fields or water access points or structures for boats, include maintenance required for upkeep of those features as well.

B. Maintenance Funding

Identify funding sources for maintenance tasks such as; outside grants, in-kind contributions of services and/or materials; Town budgets/funds etc. A general outline of short-term and long-term maintenance funding should be included for both ordinary/routine maintenance as well as extraordinary maintenance costs.

IV. Existing Regulations

A. Conformance

This section should address existing regulations adopted by the Town and/or the State of Massachusetts and how the Management Plan will conform to those regulations. Include the title and dates existing regulations were adopted.

V. Plan Participants

A. <u>List of Participants</u>

Include the list of groups, committees, residents etc. who participated and had input into the development of the Management Plan. Include dates and minutes of meetings.

VI. Maps & Plans

- a. Survey Plan of property
- b. Ortho image map with trail, parking and other infrastructure (existing or proposed)
- c. Protected Open Space & Natural Resource map
- d. USGS topographic quad map
- e. Conservation/Agricultural Restriction plan
- f. Easement Plan

VII. Attachments

- a. Natural Resource Inventory/Report
- b. Conservation/Agricultural Restrictions
- c. Access Easements
- d. Property Deed
- e. Existing Regulations
- f. Tables
- g. Meeting Minutes